

Appln. No. 09/418,628  
Response dated: August 11, 2004  
Reply to Office Action dated May 19, 2004

### **REMARKS AND ARGUMENTS**

These remarks are set forth in response to the final office action mailed May 19, 2004 (the "Office Action"). As this reply has been timely filed within the three-month statutory period, neither an extension of time nor a fee is required. Claims 1 through 23 are presently pending in the Patent Application. In the Office Action, claims 18-23 have been rejected under 35 U.S.C. §102(b). Claims 1-17 were rejected under 35 U.S.C. §103(a).

#### **I. Brief Review of Applicant's Invention**

Applicant's invention concerns dynamic allocation of channel processors used in broadband base stations. More particularly, a plurality of channel processors are allocated to a transceiver for processing traffic channels contained on a frequency channel. Importantly, the channel processors are not assigned to specific traffic channels. Instead, each channel processor is configured to be operable on any of a plurality of traffic channels. In response to notification of a call to or from a subscriber in a cell with which the transceiver is associated, a determination is made to identify which of the channel processors are available for processing the call. The call is then assigned to any one of the available channel processors.

#### **II. Rejection under 35 U.S.C. §102(b)**

In the Office Action, claims 18-23 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,670,899 to Brody et al. ("Brody"). However, Applicant believes the Examiner may have misunderstood the teachings of Brody in making the foregoing rejection. Accordingly, it is believed that a brief review of the Brody reference

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Appln. No. 09/418,628  
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may be helpful for assisting the Examiner in recognizing the differences between that invention and the invention recited in Applicant's claims.

Brody addresses the problem of balancing loading of cells in a cellular mobile telephone system. Channel utilization is determined in each cell and calls handled by cells with higher voice channel occupancy levels are handed-off to adjacent cells with lower voice occupancy levels. Importantly, each of the cells contains its own base station (T9, T2, T3) having respective transceivers. Thus, rather than allocating channel processors within a single transceiver for processing calls, Brody is directed to transferring calls from one transceiver to an entirely new transceiver in a different cell. Accordingly, Brody's load balance is only applicable in the circumstance when a mobile telephone is located in a region of cell area overlap, which typically is limited only to a very small percentage of a transceiver's coverage area.

Regarding claims 18 and 23, each of these claims recites the limitation of allocating to a transceiver assigned to a cell a first plurality of channel processors for processing traffic channels contained on a frequency channel. The Examiner asserts that Brody discloses this limitation in Fig. 2 and at col. 9, lines 40-68 and col. 9, line 56 – col. 10, line 15. Applicant respectfully disagrees with the Examiner's assertion. Notably, Fig. 2 and the cited passages disclose the use of multiple transceivers which may operate simultaneously. However, nowhere does Brody teach or suggest assigning a plurality of channel processors to the transceivers.

In the rejection, the Examiner appears to be equating the term "channel processor" with the term "transceiver," but the terms are not synonymous. As defined in Applicant's specification, a transceiver is capable of providing upconversion and downconversion of a portion of RF spectrum between a given band-of-interest for a sector module and an

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Appln. No. 09/418,628  
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intermediate frequency (IF). On the other hand, as defined in Applicant's specification, channel processors do not perform such upconversion and downconversion. Instead, the channel processors perform specific signal processing functions on channelized data. For example, as described, the channel processors can remove correction and encryption algorithms placed in traffic signals to make the signals more robust during transmission. Further, the channel processors also can add correction and encryption algorithms to the traffic signals (page 12, lines 15-29). Such operations are not performed by transceivers. Moreover, the channel processors are described by Applicant as being contained in DSP modules 40a-40n, which are independent of the transceiver 28a. As shown in Fig. 1, the DSP modules 40a-40n are distinct from the transceiver 28a and, indeed, communicate with the transceiver 28a via TDM buses 32, 36 and a channelizer/combiner 30a. Thus, it is erroneous to assert that Brody's VCO transceivers are equivalent to Applicants channel processors.

Claims 18 and 23 also recite determining if there is at least one of the first plurality of channel processors available for processing a call in response to notification of the call, and assigning the call to any one of the first plurality of channel processors that is available. Brody wholly lacks any teaching or suggestion of these limitations. Instead, Brody merely actuates specific transceivers for handling calls.

In the rejection of claims 19-22, the Examiner again has relied upon the erroneous equivalency of the terms "transceiver" and "channel processor." As noted, the terms are not synonymous, and thus Brody also fails to disclose each of the limitations contained in claims 19-22.

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III. Rejection under 35 U.S.C. §103(a)

Claims 1-6, 8-13 and 15-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Brody in view of U.S. Patent No. 5,970,410 to Carney et al. ("Carney"). Claims 4 and 11 were also rejected under 35 U.S.C. §103(a) as being unpatentable over Brody and Carney and in further view of known prior art. Finally, claims 7 and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Brody and Carney and in further view of U.S. Patent No. 6,278,875 to Sun. Notwithstanding the failure of the combination of these references to recite each limitation contained in the subject claims, the provisions of 35 U.S.C. §103(c) preclude Carney from being used in combination with other references to form a rejection under 35 U.S.C. §103(a). Specifically, Carney and the present application were, at the time the present invention was made, owned by the same person, namely AirNet Communications Corporation. Attached herewith is a copy of the recorded assignment. Moreover, Carney qualifies as prior art, if at all, only pursuant to 35 U.S.C. §102(e). Thus, the requirements of 35 U.S.C. §103(c) have been satisfied and Carney may not be used to support a rejection of the present invention under 35 U.S.C. §103(a).

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Appln. No. 09/418,628  
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IV. Conclusion

For the foregoing reasons, this entire application is believed to be in condition for allowance. Consequently, such action is respectfully requested. The Applicant requests that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

Date: 8/11/04



Robert J. Sacco  
Registration No. 35,667  
Terry W. Forsythe  
Registration No. 47,569  
SACCO & ASSOCIATES, P.A.  
P.O. Box 30999  
Palm Beach Gardens, FL 33420-0999  
Tel: 561-626-2222

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QUARLES & BRADY LLP  
ROBERT J. SACCO, ESQ.  
222 LAKEVIEW AVENUE, 4TH FLOOR  
WEST PALM BEACH, FLORIDA 33401

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BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

WILLIAMS, TERRY L.

DOC DATE: 10/14/1999

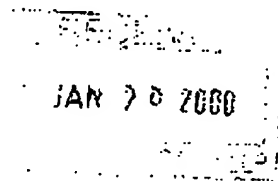
ASSIGNEE:

AIRNET COMMUNICATIONS CORPORATION  
100 RIALTO PLACE, SUITE 300  
MELBOURNE, FLORIDA 32901

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PATENT NUMBER:

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Name: Airnet Communications Corporation

Internal Address:

Street Address: 100 Rialto Place, Suite 300  
Melbourne, Florida 32901  
U.S.A.Additional name(s) & address(es) attached? ☐ Yes ☒ No

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If this document is being filed with a new application, the execution date of the application is: October 14, 1999

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## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Robert J. Sacco, Esq.

Internal Address: \_\_\_\_\_

Street Address: QUARLES & BRADY LLP  
222 Lakeview Avenue - 4th Floor  
West Palm Beach, FL 33401

## 6. Total number of applications and patents involved: 2

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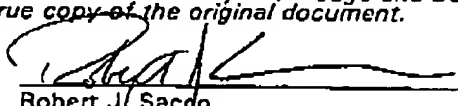
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ASSIGNMENT

WHEREAS, I, Terry L. WILLIAMS of Melbourne Beach, Florida, a citizen of the United States of America (hereinafter referred to as "ASSIGNOR"), am the inventor of certain inventions or improvements in METHOD FOR DYNAMIC ALLOCATION OF WIRELESS BASE STATION DSP RESOURCES, for which I have executed an application for Letters Patent of the United States of America therefor; and,

WHEREAS, AIRNET COMMUNICATIONS CORPORATION, having its principal place of business at 100 Rialto Place, Suite 300, Melbourne, Florida 32901 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire right, title and interest in and to said inventions or improvements and in and to said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof;

NOW, THEREFORE, for and in consideration of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the ASSIGNOR does hereby sell and assign to the ASSIGNEE, its successors and assigns, his entire right, title and interest in and to said invention and in and to said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations and extensions thereof; and the



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The ASSIGNOR also hereby sells and assigns to the ASSIGNEE, their successors and assigns, his foreign rights to the invention disclosed in said application, in all patent-granting countries of the world, including the right to file applications and obtain patents for said invention in its own name in said countries and including all rights of priority in said countries under the terms of the International Convention for the Protection of Industrial Property, and the ASSIGNOR further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

The ASSIGNOR also hereby agrees, at the request and expense of the ASSIGNEE, to testify in any legal proceedings, sign all lawful papers, make all lawful oaths, and generally do everything possible to aid said ASSIGNEE, its successors and assigns, to obtain and enforce proper patent protection for said invention in all countries.

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The ASSIGNOR also hereby grants J. Rodman Steele, Jr.,  
Reg. No. 25,931; Gregory A. Nelson, Reg. No. 30,577; Robert J.  
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